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Legal Department  
Incyte Genomics Inc  
3160 Porter Drive  
Palo Alto, CA 94304

EXAMINER

KAM, CHIH MIN

ART UNIT

PAPER NUMBER

1653

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/049,742	YUE ET AL.	
	Examiner Chih-Min Kam	Art Unit 1653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-11, 13, 15-17, 19, 22, 25, 26 and 28 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) \_\_\_\_ is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) 1-11, 13, 15-17, 19, 22, 25, 26 and 28 are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.  
 4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group 1, claims 1-7, 9, 11, 16, 17, 19, 22 and 26, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:1; a composition comprising the polypeptide, an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:1 or a polynucleotide related to SEQ ID NO:12, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:1, and a method for screening a compound that modulating the activity of the polypeptide.

Group 2, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:2; a composition comprising the polypeptide.

Group 3, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:3; a composition comprising the polypeptide.

Group 4, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:4; a composition comprising the polypeptide.

Group 5, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:5; a composition comprising the polypeptide.

Group 6, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:6; a composition comprising the polypeptide.

Group 7, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:7; a composition comprising the polypeptide.

Group 8, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:8; a composition comprising the polypeptide.

Group 9, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:9; a composition comprising the polypeptide.

Group 10, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:10; a composition comprising the polypeptide.

Group 11, claims 1, 2, 16 and 17, drawn to an isolated polypeptide comprising an amino acid sequence related to SEQ ID NO:11; a composition comprising the polypeptide.

Group 12, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:2 or a polynucleotide related to SEQ ID NO:13, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:2.

Group 13, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:3 or a polynucleotide related to SEQ ID NO:14, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:3.

Group 14, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:4 or a polynucleotide related to SEQ ID NO:15, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:4.

Group 15, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:5 or a polynucleotide related to SEQ ID NO:16, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:5.

Group 16, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:6 or a polynucleotide related to SEQ ID NO:17, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:6.

Group 17, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:7 or a polynucleotide related to SEQ ID NO:18, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:7.

Group 18, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:8 or a polynucleotide related to SEQ ID NO:19, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:8.

Group 19, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:9 or a polynucleotide related to SEQ ID NO:20, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:9.

Group 20, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:10 or a polynucleotide related to SEQ ID NO:21, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:10.

Group 21, claims 3-7, 9 and 11, drawn to an isolated polynucleotide encoding a polypeptide related to SEQ ID NO:11 or a polynucleotide related to SEQ ID NO:22, a cell transformed with the polynucleotide, a method for producing a polypeptide related to SEQ ID NO:11.

Group 22, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:1.

Group 23, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:2.

Group 24, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:3.

Group 25, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:4.

Group 26, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:5.

Group 27, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:6.

Group 28, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:7.

Group 29, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:8.

Group 30, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:9.

Group 31, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:10.

Group 32, claim 8, drawn to a transgenic organism comprising a recombinant polynucleotide having a promoter operably linked to a polynucleotide encoding a polypeptide related to SEQ ID NO:11.

Group 33, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 1.

Group 34, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 2.

Group 35, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 3.

Group 36, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 4.

Group 37, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 5.

Group 38, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 6.

Group 39, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 7.

Group 40, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 8.

Group 41, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 9.

Group 42, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 10.

Group 43, claim 10, drawn to an isolated antibody which specifically binds to a polypeptide related to SEQ ID NO: 11.

Group 44, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:12.

Group 45, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:13.

Group 46, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:14.

Group 47, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:15.

Group 48, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:16.

Group 49, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:17.

Group 50, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:18.

Group 51, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:19.

Group 52, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:20.

Group 53, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:21.

Group 54, claims 13 and 15, drawn to a method for detecting a target polynucleotide in a sample by detecting the hybridization complex or using PCR to amplify the polynucleotide, where the nucleotide sequence is related to SEQ ID NO:22.

Group 55, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:2.

Group 56, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:3.

Group 57, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:4.

Group 58, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:5.

Group 59, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:6.

Group 60, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:7.

Group 61, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:8.

Group 62, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:9.

Group 63, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:10.

Group 64, claims 19, 22 and 26, drawn to a method for screening a compound that modulating the activity of a polypeptide related to SEQ ID NO:11.

Group 65, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:1.

Group 66, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:2.

Group 67, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:3.

Group 68, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:4.

Group 69, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:5.

Group 70, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:6.

Group 71, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:7.

Group 72, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:8.

Group 73, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:9.

Group 74, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:10.

Group 75, claim 25, drawn to a method for screening a compound that specifically binds to a polypeptide related to SEQ ID NO:11.

Group 76, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:12.

Group 77, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:13.

Group 78, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:14.

Group 79, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:15.

Group 80, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:16.

Group 81, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:17.

Group 82, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:18.

Group 83, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:19.

Group 84, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:20.

Group 85, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:21.

Group 86, claim 28, drawn to a method for assessing toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated sample with a probe comprising at least 20 contiguous nucleotides of a nucleotide sequence of SEQ ID NO:22.

The claims of these groups are directed to different inventions, which are not linked to form a single general concept. The claims in the different groups do not have in common the same or corresponding technical features. In particular, each group is directed to distinct chemical entities and/or methods which use different materials and produce different effects. Accordingly, the claims are not so linked by a special technical feature within the meaning of PCT Rule 13.2 so as to form a single inventive concept and lack of unity is deemed proper.

Insofar as Groups 1-86 are directed to polypeptides, polynucleotides, methods of making polypeptides, and methods of use polypeptides and polynucleotides, each is defined by a sequence of amino acids and nucleotides that is independent and/or patentably distinct, one from the other.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

A telephone call was made to Diana Hamlet-Cox on September 22, 2003 to request an oral election to the above restriction requirement, but did not result in an election being made.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (703) 308-9437. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on (703) 308-2923. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-0294 for regular communications and (703) 308-4227 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Chih-Min Kam, Ph. D. *CMK*  
Patent Examiner

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September 22, 2003

*Christopher S. F. Low*  
CHRISTOPHER S. F. LOW  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600